

**This Page Is Inserted by IFW Operations
and is not a part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

PATENT ABSTRACTS OF JAPAN.

(11)Publication number : 2000-242724

(43)Date of publication of application : 08.09.2000

(51)Int.Cl. G06F 19/00
G06F 17/60
G06F 17/30

(71)Applicant : HITACHI LTD

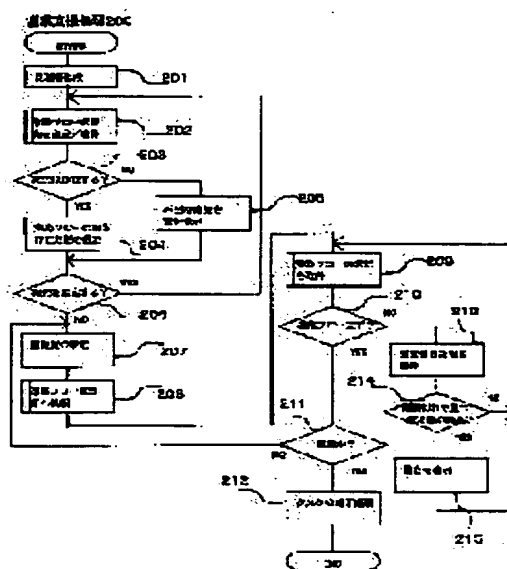
(72)Inventor : SUZUKI TAKEHIRO
SUZUKI YUUHO
FUKUDA HIROTADA
HIBI YUKIHIRO

(54) METHOD FOR LINKING BUSINESS SUPPORT SYSTEM AND JOB FLOW SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To make confirmable the conditions of a documentary examination by a job flow system from a business support system by registering a job to be requested to the job flow system as a task of the business support system.

SOLUTION: For example, an in-house circulating approval request processing of an estimation request as a job for performing an approval request according to designated circulation order, before requesting processing, the personal name or belonging information of the in-house circulating approval request destination is inputted from an input device (S202). Besides, an approval limit or priority of the in-house circulating approval request is inputted (S204 and S207). A prepared estimate and job flow request destination information are dispatched to a job flow processing part, the job flow ID of a relevant client is dispatched to the job flow processing part and the flow table of a job flow, to which the in-house circulating approval request is requested and acquired (S208 and S209). The information acquisition, completion judgement and warning judgement of the job flow are repeated until the job flow of the in-house circulating approval request (S209, S210 and S214) is completed, and in the case of all approval, the completion of an estimate request task is displayed on a display device (S221 and S212).



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date for requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The computer which consists of composition of the control unit which controls the storage which memorizes the input unit and the customer information concerned for inputting the customer information characterized by providing the following, the display which displays the accumulated customer information, the operating support processing section which processes a operating support system, the operating flow processing section which processes an operating flow system, and these processing section. A storage means to relate with the task which standardized the customer information inputted from the aforementioned input unit, and to memorize. A display means to indicate processing and un-processing. [of the task concerned]

[Claim 2] the cooperation method of the operating support system characterized by setting up the term corresponding to the trustee of each above, and carrying out the alarm display of the expiration in the trustee of each above to the circulation sequence of the trustee when requesting processing to an operating flow system in the cooperation method of the operating support system of a claim 1, and an operating flow system, and an operating flow system

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to the system by which the system which supports operating activities aiming at grasping the situation about customer dealings, and the operating flow system aiming at automation of the business which performs a recognition request according to the circulation sequence by specifying circulation sequence cooperated.

[0002]

[Description of the Prior Art] Like the publication to JP,10-27198,A, the conventional operating support system managed data, such as a customer in operating activities, an order received, and sales, is a operating support system which supports decision making, and was performing examination processing using the operating flow system which obtains recognition on the printed document or is represented by JP,8-320899,A about the function of the operating flow accompanied by in-house requests for decision, such as recognition of an estimate.

[0003]

[Problem(s) to be Solved by the Invention] In the conventional system, since a operating support system and an operating flow system are another systems, when performing recognition processing by the in-house request for decision using an operating flow system as part of operating activities, in order to start both a operating support system and an operating flow system and to shift to the task of the following operating activities with a operating support system, there was a problem that it was always necessary to check the situation of an in-house request for decision by the operating flow system.

[0004] The purpose of this invention is by registering the business requested from an operating flow system as a task of a operating support system to enable it to check the situation of the documents examination by the operating flow system from a operating support system.

[0005]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, when the business requested from the operating flow system is completed, suppose that completion of a task is displayed on the task concerned of the task list of operating support systems by this invention by preparing the function to report that the operating flow concerned was completed to a operating support system.

[0006] Moreover, in this invention, it prevents not noticing stagnation of business by preparing the function to set up the completion term of a recognition trustee, about the task under processing by the operating flow system. Furthermore by this invention, stagnation of business is prevented by displaying an alarm display for an alarm display frequently with a priority by establishing a priority in case of emergency.

[0007]

[Embodiments of the Invention] Hereafter, based on a drawing, it explains as a gestalt of the concrete operation in the above-mentioned claim.

[0008] For drawing 1, an example of the system configuration of this invention and drawing 2 are [the example of the information on customer data accumulation equipment and drawing 9 of the example and drawing 8 as which in the example of a display of the task screen of a operating support system and drawing 4 the example of a display of the situation of an operating flow and drawing 6 displayed the example of the cooperation sequence of a operating support system and an operating flow, and, as for drawing 7, the example of an estimate and drawing 5 display of completion of a task] the examples of

[0009] First, it becomes from the terminal unit 100 which consists of the control unit 108 which controls the input unit 101 which drawing 1 is an example of this structure of a system, and the business 111 in its duty inputs, the operating support processing section 106 which performs processing of a operating support system and the operating flow processing section 107 which processes an operating flow system, and the processing section concerned, display 103 which display the information on a operating support system or an operating flow system, customer data-accumulation equipment 104 which accumulate customer data, and operating flow accumulation equipment 105 which accumulate the information 140 expresses the relation of the information accumulated to customer data accumulation equipment, accumulates two or more customer information 141, customer issue information 142, and customer dealings information 145, and accumulates two or more issues and dealings information to a customer. Moreover, in order to request an operating flow, the operating flow management information 143 and the operating flow trust information 144 are accumulated to customer data accumulation equipment 104. The detail of the the se-accumulated information is expressed with drawing 8.

[0010] In order to accumulate the recognition sequence requested from an operating flow, recognition sequence is expressed with the operating flow trustee information 801 sequentially from the top, and it accumulates using it with composition, such as the destination ID 812 showing the trustee ID 811 and recognition place for managing trustee information uniquely, the destination 813, affiliation 814, office organization 815, and the requested term 816 for every destination.

[0011] In order to accumulate the information requested from the operating flow in the operating flow management information 802, Operating flow management information The business requested from ID821 for managing uniquely, and the operating flow It accumulates with composition called the trustee ID 827 which associates the recognition sequence of the customer ID 825 related to the priority 824 of the business name 823 which accumulates the task requested from the operating flow ID 822 managed uniquely and the operating flow, and the requested business, and the requested business, an issue ID 826, and an operating flow.

[0012] Using the customer information 803, in order to accumulate the information about a customer, it accumulates with composition, such as the address 836 showing the scale of the affiliation 833 of the person in charge of the customer ID 831 for managing customer information uniquely, the customer name 832, and a customer, a person in charge 834, and a customer of 825 employees and a customer, a customer's issue ID 837, and the customer dealings ID 838.

[0013] Using the customer issue information 804, in order to accumulate about a customer issue, a customer issue is accumulated with composition, such as the tradename 842 which the issue ID 841 and customer who manage uniquely are demanding, a bar code 843, quantity 844, a unit price 845, and the amount of money 846.

[0014] Using the customer dealings information 805, in order to accumulate a dealings condition with a customer, dealings information is accumulated with composition, such as the customer dealings ID 851 managed uniquely, the dealings item 852 with a customer, the state 853 of the dealings item, the opening day 854 of a dealings item, and a completing date 855.

[0015] 150 expresses the information accumulated to operating flow accumulation equipment, and it is accumulated with composition called the object 916 which are documents, such as 914, the condition 915 of business, and an estimate, at the time of the receiver's address ID 913 for requesting the request ID 912 showing the business ID 911 and the trustee for managing an operating flow uniquely, and business from a degree, and the processing date of business in order to manage an operating flow. Moreover, user information, such as the destination ID also in the operating flow trustee information 801 which is needed as the destination in an operating flow, a name, affiliation, and office organization, is also accumulated.

[0016] Next, in the example of composition of above drawing 1, it explains based on the flow chart of drawing 2 by making in-house request-for-decision processing of a request for quotation into an example as business which performs a recognition request about the cooperation method of a operating support system and an operating flow system according to the circulation sequence by specifying circulation sequence. In addition, although considered as in-house request-for-decision processing in the example, anything shall be sufficient as long as it is the business which can be requested from an operating flow system.

[0017] First, at Step 201, the information concerned is acquired from the customer data accumulation equipment 104 which is accumulating the customer information 803 of the corresponding customer, and the customer issue information 804, and an estimate is drawn up. The example of a screen of the operating support system before estimate creation is drawing 3, 310 of drawing 3 shows the customer information 803 acquired from customer data accumulation equipment 104, and 320 shows the customer dealings information 805 which is in a dealings state with the customer concerned. Below, this dealings item 322 is called task. This task is operating activities which the business in its duty performs, and it can grasp what operating activities next, the business in its duty should perform based on this. Although the operating activities which the business in its duty, such as "contact is taken with a customer", a "customer proposal", a "request for quotation", an "estimated proposal", "customer recognition", and "order", performs as an example are raised, operating activities shall be carried out, while necessarily not carrying out operating activities at this sequence and the business in its duty carries out a setup and change in a task, since it becomes the task which changes with various types of industry or conditions of those in original customer dealings. 323 shows the opening day of each task and 324 shows the completing date of each task. The business in its duty is urged to perform the task of a request for quotation next because there is no check in 321. Thereby, the business in its duty draws up an estimate by choosing the request for quotation of 321.

[0018] The example of the creation screen of an estimate is drawing 4, and 410 of drawing 4 shows the customer issue information 804 acquired from customer data accumulation equipment 104. The recognition button which pushes 421 when [which receives an estimate] recognizing, and 422 are rejection buttons pushed when dismissing to an estimate. In case a request for quotation is performed in an operating flow, the recognition state in the request-for-decision point in each company is set as the state 915 in the request-for-decision point in each company of the operating flow table 901 by pushing recognition or a rejection button. The drawn-up estimate is accumulated to customer data accumulation equipment 104 as customer data.

[0019] Next, at Step 202, before requesting processing of an in-house request for decision from an operating flow system, in order to set up the in-house request-for-decision point, the information which specifies the in-house request-for-decision point of the name of a person of the in-house request-for-decision point or affiliation information is inputted from an input unit 101, and in-house request-for-decision point information is acquired according to the acquisition sequence 601 of trustee information.

[0020] Next, at Steps 203, 204, and 205, it judges first whether the in-house request-for-decision point exists

based on the information on the in-house request-for-decision point acquired at the above-mentioned step 202 by Step 203. When the in-house request-for-decision point does not exist as a result of a judgment, the alarm display of the purport which does not exist at Step 205 is displayed on display 103. When the in-house request-for-decision point exists, the term which inputted and inputted the recognition term to the in-house request-for-decision point at Step 204 is set as the request term 816 of the request-for-decision trustee in each company of the operating flow request information 801, and it accumulates to customer data accumulation equipment 104.

[0021] Next, at Step 206, whether finally a setup of the in-house request-for-decision point is carried out, and when judging and still setting up, it returns to acquisition of the in-house request-for-decision point at Step 202, and sets up to the in-house request-for-decision point used as last. It is accumulated in order of a trustee by repeating this at the operating flow trustee information 801. When ending a setup, it shifts to Step 207.

[0022] Next, at Step 207, the priority of the in-house request for decision requested from an operating flow system is inputted, and it is set as the priority 824 of the operating flow management information 802, and accumulates to customer data accumulation equipment 104.

[0023] Next, at Step 208, in order to request an in-house request for decision from an operating flow system, by passing the estimate and the operating flow trustee information 801 which were created at the above-mentioned step 201 to the operating flow processing section 107 according to the request sequence 602 to an operating flow, the operating flow ID is acquired, and is set as the corresponding operating flow ID 822 of Customer ID and the operating flow management information 802, and it accumulates to customer data accumulation equipment 104. Recognition and rejection are performed to a request-for-quotation document at the request-for-decision point in each company by pushing the recognition button 431 or the rejection button 432 of drawing 4 about recognition processing of the requested estimate, and recognition and rejection are set as the state 915 of the destination ID of the operating flow table 901 concerned.

[0024] Next, at Step 209, according to the state acquisition sequence 603 of an operating flow, the operating flow ID of the customer applicable to the operating flow processing section 107 is passed, the operating flow table 901 of the operating flow which requested the in-house request for decision is acquired, and it accumulates to customer data accumulation equipment 104.

[0025] Next, at Step 210, it judges whether the information 901 on the operating flow acquired at the above-mentioned step 209 is completed. If the requested business is completed, it shifts to Step 211, it shifts to the processing of the alarm display by Steps 213, 214, and 215 if it becomes which has not been completed, and the information acquisition 209, the completion judging 210, and the warning judging 214 of an operating flow will be repeated until the operating flow of the requested in-house request for decision is completed.

[0026] Next, at Steps 213, 214, and 215, the operating flow trustee information 801 is acquired and it compares with the present day. Moreover, the priority 824 of the operating flow which corresponds from the operating flow management information 802 is acquired, comparison depended the degree of priority is performed, and whether the alarm display of the operating flow under in-house request for decision is carried out, when judging and having passed from the present day as a result of the judgment, or when a priority is emergency, the warning of a term is displayed on display 103 about the operating flow under corresponding in-house request for decision. It returns to Step 209 after that, the state of the operating flow again requested to the operating flow processing section 107 is acquired, and a completion judging is repeated.

[0027] Next, at Step 211, the result of the operating flow of an in-house request for decision is judged from the status information of the operating flow acquired at Step 209. Although it will shift to the following step 212 if it is recognition altogether, if it is rejection, an estimate will be drawn up or corrected again, it returns to Step 207 and the in-house request for decision by operating flow processing is redone.

[0028] Next, at Step 212, in order to process completion of a task, the customer dealings information 805 concerned is acquired from customer data accumulation equipment 104, completion is set as 853 of the task concerned, the date completed on the completing date of 855 is set up, and it accumulates to customer data accumulation equipment 104. The example of a display of completion of a task is drawing 7, it displays the completion check of the task concerned on the completion check 701 as it was shown in this, displays with a completing date on a completing date 702, and displays completion for the task of the request for quotation which is the task concerned on display 103.

[0029] If the demand which refers to the processing situation of an operating flow occurs when referring to the dealings situation of the corresponding customer in the step of all above, the situation of the operating flow of the customer data which correspond according to the situation display sequence 604 of an operating flow will be displayed on display 103 like 520 of drawing 5. In addition, although [this example] the situation of an operating flow is acquired and displayed with a operating support system about the situation display of an operating flow, you shall display by requesting an operating flow.

[0030] Thus, by following the flow chart of drawing 2, when making a operating support system and an operating flow system cooperate, completion of the business by the operating flow system can be checked now in a operating support system, and operating efficiency improves.

[0031] Moreover, since it turns out where it has stagnated in situation display when having prevented and stagnated that the business of a task stagnates by setting up the completion term and priority of the task concerned, suitable means can be taken, and business can be promoted.

[0032] It becomes unnecessary moreover, to always start two systems by the ability of the situation of an operating flow to be displayed from a operating support system.

[0033]

[Effect of the Invention] The part and operating flow of a task of an operating support system are made to cooperate, the recognition request of processing objects, such as a document, is automated in an operating flow, recognition carrying about is lost, and since recognition work is controlled until recognition is completed or it is dismissed, improvement in efficiency of work can be performed.

[0034] Moreover, the place where the display of the recognition situation by the operating flow has stagnated by the bird clapper possible — suitable cure **** — things are made

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. *** shows the word which can not be translated.
3. In the drawings, any words are not translated.

TECHNICAL FIELD

[The technical field to which invention belongs] this invention relates to the system by which the system which supports operating activities aiming at grasping the situation about customer dealings, and the operating flow system aiming at automation of the business which performs a recognition request according to the circulation sequence by specifying circulation sequence cooperated.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. *** shows the word which can not be translated.
3. In the drawings, any words are not translated.

PRIOR ART

[Description of the Prior Art] Like the publication to JP,10-27198,A, the conventional operating support system managed data, such as a customer in operating activities, an order received, and sales, is a operating support system which supports decision making, and was performing examination processing using the operating flow system which obtains recognition on the printed document or is represented by JP,8-320899,A about the function of the operating flow accompanied by in-house requests for decision, such as recognition of an estimate.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

EFFECT OF THE INVENTION

[Effect of the Invention] The part and operating flow of a task of a operating support system are made to cooperate, the recognition request of processing objects, such as a document, is automated in an operating flow, recognition carrying about is lost, and since recognition work is controlled until recognition is completed or it is dismissed, improvement in efficiency of work can be performed.

[0034] moreover, the place where the display of the recognition situation by the operating flow has stagnated by the bird clapper possible — suitable cure **** — things are made

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] In the conventional system, since a operating support system and an operating flow system are another systems, when performing recognition processing by the in-house request for decision using an operating flow system as part of operating activities, in order to start both a operating support system and an operating flow system and to shift to the task of the following operating activities with a operating support system, there was a problem that it was always necessary to check the situation of an in-house request for decision by the operating flow system.

[0004] The purpose of this invention is by registering the business requested from an operating flow system as a task of a operating support system to enable it to check the situation of the documents examination by the operating flow system from a operating support system.

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

MEANS

[Means for Solving the Problem] In order to attain the above-mentioned purpose, when the business requested from the operating flow system is completed, suppose that completion of a task is displayed on the task concerned of the task list of operating support systems by this invention by preparing the function to report that the operating flow concerned was completed to a operating support system.

[0006] Moreover, in this invention, it prevents not noticing stagnation of business by preparing the function to set up the completion term of a recognition trustee, about the task under processing by the operating flow system. Furthermore by this invention, stagnation of business is prevented by displaying an alarm display for an alarm display frequently with a priority by establishing a priority in case of emergency.

[0007]

[Embodiments of the Invention] Hereafter, based on a drawing, it explains as a gestalt of the concrete operation in the above-mentioned claim.

[0008] For drawing 1, an example of the system configuration of this invention and drawing 2 are [the example of the information on customer data accumulation equipment and drawing 9 of the example and drawing 8 as which in the example of a display of the task screen of a operating support system and drawing 4 the example of a display of the situation of an operating flow and drawing 6 displayed the example of the cooperation sequence of a operating support system and an operating flow, and, as for drawing 7, the example of an estimate and drawing 5 display the completion of a task] the examples of

[0009] First, it becomes from the terminal unit 100 which consists of the control unit 108 which controls the input unit 101 which drawing 1 is an example of this structure of a system, and the business 111 in its duty inputs, the operating support processing section 106 which performs processing of a operating support system and the operating flow processing section 107 which processes an operating flow system, and the processing section concerned, display 103 which display the information on a operating support system or an operating flow system, customer data-accumulation equipment 104 which accumulate customer data, and operating flow accumulation equipment 105 which accumulate the information 140 expresses the relation of the information accumulated to customer data accumulation equipment, accumulates two or more customer information 141, customer issue information 142, and customer dealings information 145, and accumulates two or more issues and dealings information to a customer. Moreover, in order to request an operating flow, the operating flow management information 143 and the operating flow trustee information 144 are accumulated to customer data accumulation equipment 104. The detail of the these-accumulated information is expressed with drawing 8.

[0010] In order to accumulate the recognition sequence requested from an operating flow, recognition sequence is expressed with the operating flow trustee information 801 sequentially from the top, and it accumulates using it with composition, such as the destination ID 812 showing the trustee ID 811 and recognition place for managing trustee information uniquely, the destination 813, affiliation 814, office organization 815, and the request term 816 for every destination.

[0011] In order to accumulate the information requested from the operating flow in the operating flow management information 802, Operating flow management information The business requested from ID821 for managing uniquely, and the operating flow It accumulates with composition called the trustee ID 827 which associates the recognition sequence of the customer ID 825 related to the priority 824 of the business name 823 which accumulates the task requested from the operating flow ID 822 managed uniquely and the operating flow, and the requested business, and the requested business, an issue ID 826, and an operating flow.

[0012] Using the customer information 803, in order to accumulate the information about a customer, it accumulates with composition, such as the address 836 showing the scale of the affiliation 833 of the person in charge of the customer ID 831 for managing customer information uniquely, the customer name 832, and a customer, a person in charge 834, and a customer of 825 employees and a customer, a customer's issue ID 837, and the customer dealings ID 838.

[0013] Using the customer issue information 804, in order to accumulate about a customer issue, a customer issue is accumulated with composition, such as the trade name 842 which the issue ID 841 and customer who manage uniquely are demanding, a bar code 843, quantity 844, a unit price 845, and the amount of money 846.

[0014] Using the customer dealings information 805, in order to accumulate a dealings condition with a customer, dealings information is accumulated with composition, such as the customer dealings ID 851 managed uniquely, the dealings item 852 with a customer, the state 853 of the dealings item, the opening day 854 of a dealings item, and a completion date 855.

[0015] 150 expresses the information accumulated to operating flow accumulation equipment, and it is accumulated with composition called the object 916 which are documents, such as 914, the condition 915 of business, and an estimate, at the time of the receiver's address ID 913 for requesting the request ID 912 showing the business ID 911 and the trustee for managing an operating flow uniquely, and business from a degree, and the processing date of business in order to manage an operating flow. Moreover, user information, such as the destination ID also in the operating flow trustee information 801 which is needed as the destination in an operating flow, a name, affiliation, and office organization, is also accumulated.

[0016] Next, in the example of composition of above drawing 1, it explains based on the flow chart of drawing 2 by making in-house request-for-decision processing of a request for quotation into an example as business which performs a recognition request about the cooperation method of a operating support system and an operating flow system according to the circulation sequence by specifying circulation sequence. In addition, although considered as in-house request-for-decision processing in the example, anything shall be sufficient as long as it is the business which can be requested from an operating flow system.

[0017] First, at Step 201, the information concerned is acquired from the customer data accumulation equipment 104 which is accumulating the customer information 803 of the corresponding customer, and the customer issue information 804, and an estimate is drawn up. The example of a screen of the operating support system before estimate creation is drawing 3, 310 of drawing 3 shows the customer information 803 acquired from customer data accumulation equipment 104, and 320 shows the customer dealings information 805 which is in a dealings state with the customer concerned. Below, this dealings item 322 is called task. This task is operating activities which the business in its duty performs, and it can grasp what operating activities next, the business in its duty should perform based on this. Although the operating activities which the business in its duty, such as "contact is taken with a customer", a "customer proposal", a "request for quotation", an "estimated proposal", "customer recognition", and "order", performs as an example are raised, operating activities shall be carried out, while necessarily not carrying out operating activities at this sequence and the business in its duty carries out a setup and change in a task, since it becomes the task which changes with various types of industry or conditions of those in original customer dealings. 323 shows the opening day of each task and 324 shows the completing date of each task. The business in its duty is urged to perform the task of a request for quotation next because there is no check in 321. Thereby, the business in its duty draws up an estimate by choosing the request for quotation of 321.

[0018] The example of the creation screen of an estimate is drawing 4, and 410 of drawing 4 shows the customer issue information 804 acquired from customer data accumulation equipment 104. The recognition button which pushes 421 when [which receives an estimate] recognizing, and 422 are rejection buttons pushed when dismissing to an estimate. In case a request for quotation is performed in an operating flow, the recognition state in the request-for-decision point in each company is set as the state 915 in the request-for-decision point in each company of the operating flow table 901 by pushing recognition or a rejection button. The drawn-up estimate is accumulated to customer data accumulation equipment 104 as customer data.

[0019] Next, at Step 202, before requesting processing of an in-house request for decision from an operating flow system, in order to set up the in-house request-for-decision point, the information which specifies the in-house request-for-decision point of the name of a person of the in-house request-for-decision point or affiliation information is inputted from an input unit 101, and in-house request-for-decision point information is acquired according to the acquisition sequence 601 of trustee information.

[0020] Next, at Steps 203, 204, and 205, it judges first whether the in-house request-for-decision point exists based on the information on the in-house request-for-decision point acquired at the above-mentioned step 202 by Step 203. When the in-house request-for-decision point does not exist as a result of a judgment, the alarm display of the purport which does not exist at Step 205 is displayed on display 103. When the in-house request-for-decision point exists, the term which inputted and inputted the recognition term to the in-house request-for-decision point at Step 204 is set as the request term 816 of the request-for-decision trustee in each company of the operating flow request information 801, and it accumulates to customer data accumulation equipment 104.

[0021] Next, at Step 206, whether finally a setup of the in-house request-for-decision point is carried out, and when judging and still setting up, it returns to acquisition of the in-house request-for-decision point at Step 202, and sets up to the in-house request-for-decision point used as last. It is accumulated in order of a trustee by repeating this at the operating flow trustee information 801. When ending a setup, it shifts to Step 207.

[0022] Next, at Step 207, the priority of the in-house request for decision requested from an operating flow system is inputted, and it is set as the priority 824 of the operating flow management information 802, and accumulates to customer data accumulation equipment 104.

[0023] Next, at Step 208, in order to request an in-house request for decision from an operating flow system, by passing the estimate and the operating flow trustee information 801 which were created at the above-mentioned step 201 to the operating flow processing section 107 according to the request sequence 602 to an operating flow, the operating flow ID is acquired, and is set as the corresponding operating flow ID 822 of Customer ID and the operating flow management information 802, and it accumulates to customer data accumulation equipment 104. Recognition and rejection are performed to a request-for-quotation document at the request-for-decision point in each company by pushing the recognition button 431 or the rejection button 432 of drawing 4 about recognition processing of the requested estimate, and recognition and rejection are set as the state 915 of the destination ID of the operating flow table 901 concerned.

[0024] Next, at Step 209, according to the state acquisition sequence 603 of an operating flow, the operating flow ID

of the customer applicable to the operating flow processing section 107 is passed, the operating flow table 901 of the operating flow which requested the in-house request for decision is acquired, and it accumulates to customer data accumulation equipment 104.

[0025] Next, at Step 210, it judges whether the information 901 on the operating flow acquired at the above-mentioned step 209 is completed. If the requested business is completed, it shifts to Step 211, it shifts to the processing of the alarm display by Steps 213, 214, and 215 if it becomes which has not been completed, and the information acquisition 209, the completion judging 210, and the warning judging 214 of an operating flow will be repeated until the operating flow of the requested in-house request for decision is completed.

[0026] Next, at Steps 213, 214, and 215, the operating flow trustee information 801 is acquired and it compares with the present day. Moreover, the priority 824 of the operating flow which corresponds from the operating flow management information 802 is acquired, comparison depending the degree of priority is performed, and whether the alarm display of the operating flow under in-house request for decision is carried out, when judging and having passed from the present day as a result of the judgment, or when a priority is emergency, the warning of a term is displayed on display 103 about the operating flow under corresponding in-house request for decision. It returns to Step 209 after that, the state of the operating flow again requested to the operating flow processing section 107 is acquired, and a completion judging is repeated.

[0027] Next, at Step 211, the result of the operating flow of an in-house request for decision is judged from the status information of the operating flow acquired at Step 209. Although it will shift to the following step 212 if it is recognition altogether, if it is rejection, an estimate will be drawn up or corrected again, it returns to Step 207 and the in-house request for decision by operating flow processing is redone.

[0028] Next, at Step 212, in order to process completion of a task, the customer dealings information 805 concerned is acquired from customer data accumulation equipment 104, completion is set as 853 of the task concerned, the date completed on the completing date of 855 is set up, and it accumulates to customer data accumulation equipment 104. The example of a display of completion of a task is drawing 7, it displays the completion check of the task concerned on the completion check 701 as it was shown in this, displays with a completing date on a completing date 702, and displays completion for the task of the request for quotation which is the task concerned on display 103.

[0029] If the demand which refers to the processing situation of an operating flow occurs when referring to the dealings situation of the corresponding customer in the step of all above, the situation of the operating flow of the customer data which correspond according to the situation display sequence 604 of an operating flow will be displayed on display 103 like 520 of drawing 5. In addition, although [this example] the situation of an operating flow is acquired and displayed with a operating support system about the situation display of an operating flow, you shall display by requesting an operating flow.

[0030] Thus, by following the flow chart of drawing 2, when making a operating support system and an operating flow system cooperate, completion of the business by the operating flow system can be checked now in a operating support system, and operating efficiency improves.

[0031] Moreover, since it turns out where it has stagnated in situation display when having prevented and stagnated that the business of a task stagnates by setting up the completion term and priority of the task concerned, suitable means can be taken, and business can be promoted.

[0032] It becomes unnecessary moreover, to always start two systems by the ability of the situation of an operating flow to be displayed from a operating support system.

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

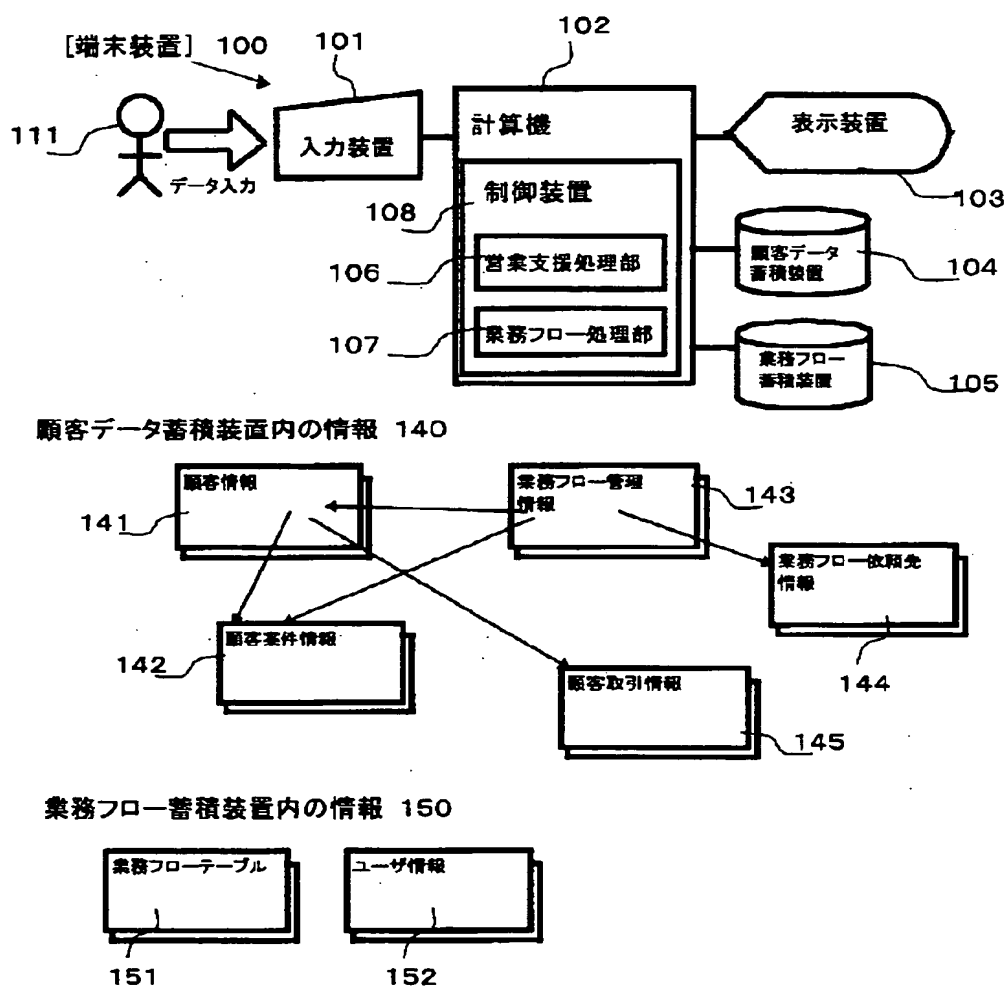
2.*** shows the word which can not be translated.

3.In the drawings, any words are not translated.

DRAWINGS

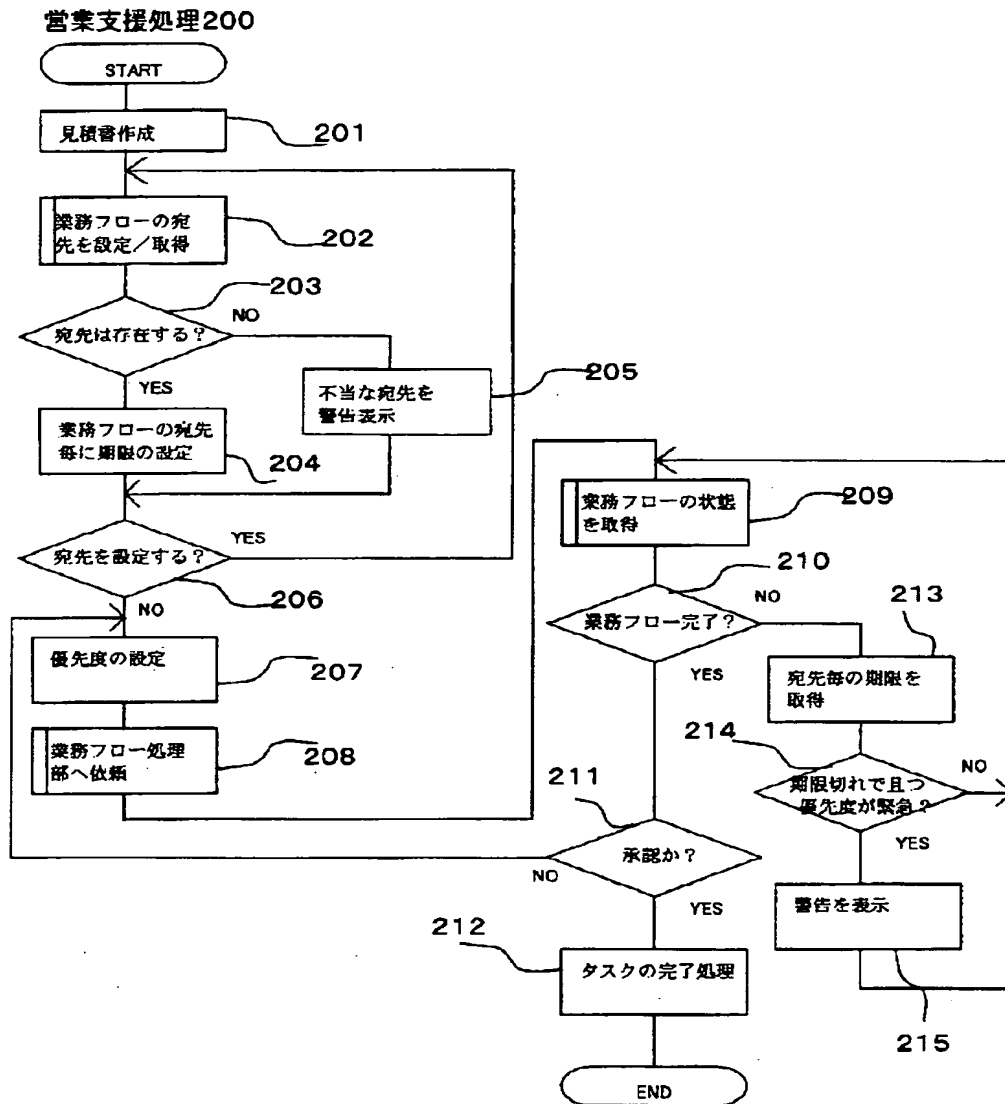
[Drawing 1]

図 1

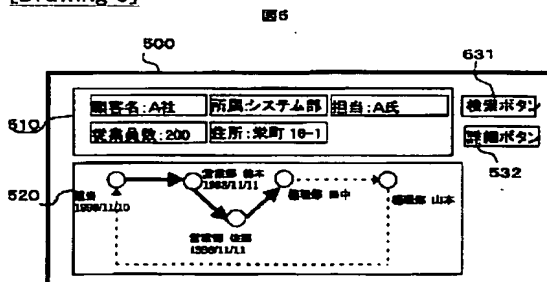


[Drawing 2]

図2



[Drawing 5]



[Drawing 9]

図9

業務フロー管理装置の情報

業務フローテーブル 901

911	912	913	914	915	916
業務ID	依頼ID	送付先ID	処理日時	状態	オフセット
MD001	00-12-01	01-33-01	1998/11/11 10:00	承認	見積書
	01-33-01	12-12-01	1998/11/11 11:00	承認	
	12-12-01	55-22-41		承認	
	55-22-41	-		承認	

[Drawing 3]

図3

300

310

顧客名: A社 所属: システム部 担当: A氏

従業員数: 200 住所: 栄町 16-1

322 323 324

320

321

331

332

検索ボタン

詳細ボタン

#	取引項目	開始日	完了日
✓	顧客とコンタクトを取る	1998/11/1	1998/11/1
✓	顧客提案	1998/11/1	1998/11/10
	見積依頼		
	見積提案		
	顧客承認		
	発注		

[Drawing 4]

図4

400

作成日: 1998/11/10

見積依頼書

会社名: A社

410

#	商品名	商品コード	数量	単価(K¥)	金額(K¥)
1	ノートPC	N-1234-567	100	200	20,000
2	PC	D-568-xxxx	10	250	2,500
3	プリンタ	P-L4000	5	100	500

承認ボタン

却下ボタン

421

422

[Drawing 7]

図7

700

顧客名: A社 所属: システム部 担当: A氏

従業員数: 200 住所: 栄町 16-1

検索ボタン

詳細ボタン

701

702

#	取引項目	開始日	完了日
✓	顧客とコンタクトを取る	1998/11/1	1998/11/1
✓	顧客提案	1998/11/1	1998/11/10
✓	見積依頼	1998/11/10	1998/11/12
	見積提案		
	顧客承認		
	発注		

[Drawing 6]

図8

顧客データ蓄積装置の情報

業務フロー依頼先情報 801

依頼先ID	宛先ID	宛先	所属	職制	依頼期限
00001	00-12-01	鈴木	営業部	上長	1998/11/12
	01-33-01	佐藤	営業部	上位上長	1998/11/12
	12-12-01	田中	経理部	上長	1998/11/13
	55-22-41	山本	経理部	上位上長	1998/11/13

業務フロー管理情報 802

ID	業務フローID	業務名	優先度	顧客ID	案件ID	依頼先ID
001	M0001	見積依頼	緊急	A-0001	AA-AB-1111	00001

顧客情報 803

顧客ID	顧客名	所属	担当	従業員数	住所	案件ID	顧客取引ID
A-0001	A社	システム部	A氏	200	東京都16-1	AA-AB-1111	BB-AAA-0001

顧客案件情報 804

案件ID	商品名	商品コード	数量	単価	金額
AA-AB-1111	ノートPC	N-1234-567	100	200	20,000
	PC	D-567-xxxx	10	250	2,500
	プリンタ	P-L4000	5	100	500

顧客取引情報 805

顧客取引ID	取引項目	状態	開始日	完了日
BB-AAA-0001	顧客とコンタクトを取る	完了	1998/11/1	1998/11/1
	顧客提案	完了	1998/11/1	1998/11/10
	見積依頼	未完	1998/11/10	
	見積提案	未完		
	顧客承認	未完		
	発注	未完		

[Translation done.]

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2000-242724

(P2000-242724A)

(43) 公開日 平成12年9月8日 (2000.9.8)

(51) Int.Cl.⁷

識別記号

F I

テーマコード(参考)

G 0 6 F 19/00
17/60
17/30

G 0 6 F 15/22
15/21
15/40

N 5 B 0 4 9
Z 5 B 0 7 5
3 7 0 Z

審査請求 未請求 請求項の数 2 O L (全 10 頁)

(21) 出願番号 特願平11-47594

(22) 出願日 平成11年2月25日 (1999.2.25)

(71) 出願人 000005108

株式会社日立製作所

東京都千代田区神田駿河台四丁目6番地

(72) 発明者 鈴木 毅弘

神奈川県横浜市戸塚区戸塚町5030番地 株

式会社日立製作所ソフトウェア事業部内

(72) 発明者 鈴木 友峰

神奈川県横浜市戸塚区戸塚町5030番地 株

式会社日立製作所ソフトウェア事業部内

(74) 代理人 100068504

弁理士 小川 勝男

最終頁に続く

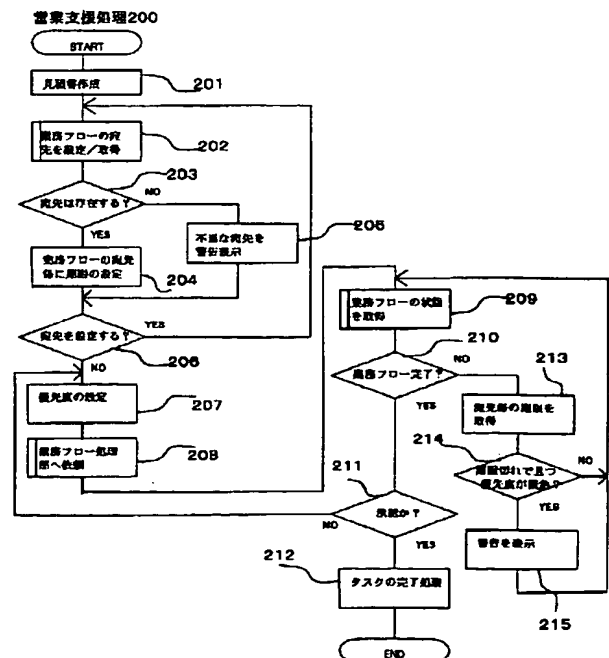
(54) 【発明の名称】 営業支援システムと業務フローシステムの連携方法

(57) 【要約】

【課題】 営業支援システムと業務フローシステムとの連携がなかったので、2つのシステムを起動しておき業務フローシステムを常に監視して承認業務の完了を検出する必要があった。また業務の状況を表示する場合には、業務フローシステムを起動して状況を確認する必要があった。

【解決手段】 営業支援システムと業務フローシステムを連携させ、営業活動である見積依頼のタスクを業務フローにて各担当営業に業務依頼して承認処理を行い、業務フローの完了通知を検知することで、常に業務フローシステムを監視する必要がなくなる。また営業支援システムから業務フローシステムを呼び出すことで業務の状況表示もできる

図2



【特許請求の範囲】

【請求項1】 顧客情報を入力するための入力装置と当該顧客情報を記憶する記憶装置と、蓄積した顧客情報を表示する表示装置と、営業支援システムを処理する営業支援処理部と、業務フローシステムを処理する業務フロー処理部と、これら処理部を制御する制御装置の構成からなる計算機において、前記入力装置から入力した顧客情報を定型化したタスクに関連付けて記憶する記憶手段と、当該タスクの処理・未処理を表示する表示手段を備えた営業支援システムが見積もりの承認を業務フローシステムに依頼する場合、見積もりの承認をタスクとして前記記憶手段へ登録し、見積もりの承認依頼を業務フローシステムへ送付し、当該承認が完了したときに業務フローシステムから承認完了の情報を受け取り、前記タスクの処理・未処理を表示する表示手段に当該タスクが完了したことを表示することを特徴とする営業支援システムと業務フローシステムの連携方法。

【請求項2】 請求項1の営業支援システムと業務フローシステムの連携方法において、業務フローシステムへ処理を依頼するときの依頼先の回覧順序と、前記各々の依頼先に対応した期限を設定し、前記各々の依頼先での期限切れを警告表示することを特徴とする営業支援システムと業務フローシステムの連携方法。

【発明の詳細な説明】**【0001】**

【発明の属する技術分野】 本発明は、顧客取引に関する状況を把握することを目的とする営業活動を支援するシステムと、回覧順序を指定することでその回覧順序に従い承認依頼を行う業務の自動化を目的とする業務フローシステムが連携したシステムに関するものである。

【0002】

【従来の技術】 従来の営業支援システムは、例えば特開平10-27198号公報に記載のように、営業活動における顧客、受注、売上などのデータを管理し、意思決定を支援する営業支援システムであり、見積書の承認など社内稟議を伴う業務フローの機能については、印刷した帳票に承認を得るか、例えば特開平8-320899に代表される業務フローシステムを使用して審査処理を行っていた。

【0003】

【発明が解決しようとする課題】 従来のシステムでは、営業支援システムと業務フローシステムが別のシステムのため、営業活動の一環として業務フローシステムを使い社内稟議による承認処理を行うとき、営業支援システムと業務フローシステムの両方を起動し、営業支援システムで次の営業活動のタスクに移行するためには、常に業務フローシステムで社内稟議の状況を確認しておく必要があるという問題があった。

【0004】 本発明の目的は、業務フローシステムに依頼する業務を、営業支援システムのタスクとして登録す

ることにより、営業支援システムから業務フローシステムによる書類審査の状況を確認できるようにすることにある。

【0005】

【課題を解決するための手段】 上記目的を達成するために、本発明では、業務フローシステムに依頼した業務が完了した時、当該業務フローが完了したことを営業支援システムに報告する機能を設けることにより、営業支援システムのタスク一覧の当該タスクにタスクの完了を表示することとしたものである。

【0006】 また本発明では、業務フローシステムで処理中のタスクについて、承認依頼先の完了期限を設定する機能を設けることにより、業務の停滞に気づかないことを防止するようにしたものである。さらに本発明では、優先度を設けることで、警告表示を優先度により緊急の場合には警告表示を頻繁に表示することで業務の停滞を防止するようにしたものである。

【0007】

【発明の実施の形態】 以下、上記請求項における具体的な実施の形態として図面に基づいて説明する。

【0008】 図1は本発明のシステム構成の一例、図2は営業支援システムと業務フローの連携方法についてのフローチャート、図3は営業支援システムのタスク画面の表示例、図4は見積書の例、図5は業務フローの状況の表示例、図6は営業支援システムと業務フローとの連携シーケンスの例、図7はタスクの完了を表示した例、図8は顧客データ蓄積装置の情報の例、図9は業務フロー蓄積装置の情報の例である。

【0009】 まず、図1は本システムの構成の一例であり、担当営業111が入力する入力装置101、営業支援システムの処理を行う営業支援処理部106と業務フローシステムを処理する業務フロー処理部107、当該処理部を制御する制御装置108、営業支援システムや業務フローシステムの情報を表示する表示装置103、顧客データを蓄積する顧客データ蓄積装置104、業務フローの情報を蓄積する業務フロー蓄積装置105から構成される端末装置100からなる。140は、顧客データ蓄積装置に蓄積する情報の関係を表しており、顧客情報141、顧客案件情報142、顧客取引情報145を複数蓄積し、顧客に対して複数の案件や取引情報を蓄積する。また業務フローに依頼するために業務フロー管理情報143や業務フロー依頼先情報144を顧客データ蓄積装置104に蓄積する。図8では、これら蓄積する情報の詳細を表している。

【0010】 業務フロー依頼先情報801では、業務フローに依頼する承認順序を蓄積するため、上から順に承認順序を表しており、依頼先情報を一意に管理するための依頼先ID811、承認先を表す宛先ID812、宛先813、所属814、職制815、宛先毎の依頼期限816といった構成で蓄積する。

【0011】業務フロー管理情報802では、業務フローに依頼した情報を蓄積するため、業務フロー管理情報を一意に管理するためのID821、業務フローに依頼した業務を一意に管理する業務フローID822、業務フローに依頼したタスクを蓄積する業務名823、依頼した業務の優先度824、依頼した業務に係る顧客ID825、案件ID826、業務フローの承認順序に関連付ける依頼先ID827といった構成で蓄積する。

【0012】顧客情報803では、顧客に関する情報を蓄積するため、顧客情報を一意に管理するための顧客ID831、顧客名832、顧客先の担当者の所属833、担当者834、顧客先の規模を表す従業員数825、顧客先の住所836、顧客の案件ID837、顧客取引ID838といった構成で蓄積する。

【0013】顧客案件情報804では、顧客案件について蓄積するため、顧客案件を一意に管理する案件ID841、顧客の要望している商品名842、商品コード843、数量844、単価845、金額846といった構成で蓄積する。

【0014】顧客取引情報805では、顧客との取引状態を蓄積するため、取引情報を一意に管理する顧客取引ID851、顧客との取引項目852、その取引項目の状態853、取引項目の開始日854、完了日855といった構成で蓄積する。

【0015】150は業務フロー蓄積装置に蓄積する情報を表しており、業務フローを管理するため、業務フローを一意に管理するための業務ID911、依頼先を表す依頼ID912、業務を次に依頼するための送付先ID913、業務の処理日時914、業務の状態915、見積書等のドキュメントであるオブジェクト916といった構成で蓄積される。また業務フローにて宛先として必要となる業務フロー依頼先情報801にもある宛先ID、氏名、所属、職制といったユーザ情報も蓄積している。

【0016】次に上記のような図1の構成例において、営業支援システムと業務フローシステムとの連携方法について、回覧順序を指定することでその回覧順序に従い承認依頼を行う業務として、見積依頼の社内稟議処理を例として、図2のフローチャートに基づき説明する。なお例では社内稟議処理としたが、業務フローシステムに依頼できる業務であればどれでもよいものとする。

【0017】まず始めにステップ201では、該当する顧客の顧客情報803、顧客案件情報804を蓄積している顧客データ蓄積装置104から当該情報を取得し見積書を作成する。見積書作成前の営業支援システムの画面例が図3であり、図3の310は顧客データ蓄積装置104から取得した顧客情報803を表示しており、320は当該顧客との取引状態である顧客取引情報805を表示している。以下ではこの取引項目322のことをタスクという。このタスクとは、担当営業が行う営業活

動であり、これを基に担当営業は次にどのような営業活動を行うべきか把握することができる。例として「顧客とコンタクトを取る」「顧客提案」「見積依頼」「見積提案」「顧客承認」「発注」といった担当営業が行う営業活動をあげているが、本来の顧客取引では、様々な業種やその条件により異なるタスクとなるので、必ずしもこの順序で営業活動を行うものではなく、担当営業がタスクを設定及び変更を行いながら営業活動を行うものとする。323は各タスクの開始日、324は各タスクの完了日を示している。321にチェックがないことで、次に見積依頼のタスクを実行するように担当営業に促している。これにより担当営業は321の見積依頼を選択することで見積書を作成する。

【0018】見積書の作成画面の例が図4であり、図4の410は顧客データ蓄積装置104から取得した顧客案件情報804を表示しており、421は見積書に対しての承認する場合に押す承認ボタン、422は見積書に対して却下する場合に押す却下ボタンであり、業務フローにて見積依頼を行う際、各社内稟議先での承認状態を承認もしくは却下ボタンを押すことで、業務フローテーブル901の各社内稟議先での状態915に設定する。作成した見積書は、顧客データとして顧客データ蓄積装置104に蓄積する。

【0019】次にステップ202では、業務フローシステムに社内稟議の処理を依頼する前に、社内稟議先を設定するため社内稟議先の人名や所属情報の社内稟議先を特定する情報を入力装置101から入力し、依頼先情報の取得シーケンス601に従い社内稟議先情報を取得する。

【0020】次にステップ203、204、205では、始めにステップ203にて、上記ステップ202で取得した社内稟議先の情報を基に、社内稟議先が存在するか判定する。判定の結果、社内稟議先が存在しない場合は、ステップ205にて存在しない旨の警告表示を表示装置103に表示する。社内稟議先が存在している場合、ステップ204にて社内稟議先に対する承認期限を入力し、入力した期限を業務フロー依頼情報801の各社内稟議依頼先の依頼期限816に設定し、顧客データ蓄積装置104に蓄積する。

【0021】次にステップ206では、社内稟議先の設定を終わりにするか判定し、まだ設定する場合は、ステップ202にて社内稟議先の取得まで戻り、最終となる社内稟議先まで設定する。これを繰り返すことで業務フロー依頼先情報801には依頼先順に蓄積される。設定を終了する場合はステップ207に移行する。

【0022】次にステップ207では、業務フローシステムに依頼する社内稟議の優先度を入力し、業務フロー管理情報802の優先度824に設定し、顧客データ蓄積装置104に蓄積する。

【0023】次にステップ208では、業務フローシ

テムに社内稟議を依頼するため、上記ステップ201で作成した見積書及び業務フロー依頼先情報801を業務フローへの依頼シーケンス602に従い業務フロー処理部107に渡すことで、業務フローIDを取得し、該当する顧客IDと業務フロー管理情報802の業務フローID822に設定し、顧客データ蓄積装置104に蓄積する。依頼した見積書の承認処理について各社内稟議先では、図4の承認ボタン431または却下ボタン432を押すことで見積依頼書に対して承認・却下を行い、業務フローテーブル901の当該宛先IDの状態915に承認・却下の設定を行う。

【0024】次にステップ209では、業務フローの状態取得シーケンス603に従い、業務フロー処理部107に該当する顧客の業務フローIDを渡し、社内稟議を依頼した業務フローの業務フローテーブル901を取得し、顧客データ蓄積装置104に蓄積しておく。

【0025】次にステップ210では、上記ステップ209にて取得した業務フローの情報901が完了しているか判定する。依頼した業務が完了しているならばステップ211へ移行し、完了していないならばステップ213、214、215による警告表示の処理へ移行し、依頼した社内稟議の業務フローが完了するまで業務フローの情報取得209と完了判定210及び警告判定214を繰り返す。

【0026】次にステップ213、214、215では、業務フロー依頼先情報801を取得し、現在日と比較を行う。また業務フロー管理情報802から該当する業務フローの優先度824を取得し、優先度による比較を行い、社内稟議中の業務フローを警告表示するか判定し、判定の結果、現在日より過ぎていた場合または優先度が緊急の場合には、該当する社内稟議中の業務フローについて期限の警告を表示装置103に表示する。その後ステップ209に戻り、再度業務フロー処理部107に対して依頼した業務フローの状態を取得し、完了判定を繰り返す。

【0027】次にステップ211では、ステップ209にて取得した業務フローの状態情報から社内稟議の業務フローの結果を判定する。すべて承認ならば次のステップ212へ移行するが、却下ならば再度見積書を作成または修正して、ステップ207に戻り業務フロー処理による社内稟議をやり直す。

【0028】次にステップ212では、タスクの完了を処理するため、当該顧客取引情報805を顧客データ蓄積装置104から取得し、当該タスクの853に完了を設定し、855の完了日に完了した日付を設定し、顧客データ蓄積装置104に蓄積する。タスクの完了の表示例は図7であり、これに示した通り完了チェック701に当該タスクの完了チェックを表示し、完了日702には完了日付を表示し、当該タスクである見積依頼のタスクを完了を表示装置103に表示するものである。

【0029】上記すべてのステップ中で、該当する顧客の取引状況を参照する場合、業務フローの処理状況を参照する要求が発生すると、業務フローの状況表示シーケンス604に従い、該当する顧客データの業務フローの状況を図5の520のように表示装置103に表示する。なお、この例では業務フローの状況表示について、営業支援システムにて業務フローの状況を取得して表示することとしているが、業務フローに依頼することで表示してもよいものとする。

【0030】このように図2のフローチャートに従うことで、営業支援システムと業務フローシステムを連携させる場合、業務フローシステムによる業務の完了を、営業支援システムの中で確認することができるようになり業務効率が向上する。

【0031】また、当該タスクの完了期限と優先度を設定することでタスクの業務が停滞することを防止し、また停滞している場合は、状況表示にてどこで停滞しているのかが分かるので適切な手段をとることができ、業務を推進することができる。

【0032】また、営業支援システムから業務フローの状況を表示できることで常に2つのシステムを起動させておく必要がなくなる。

【0033】

【発明の効果】営業支援システムのタスクの一部と業務フローを連携させ、帳票等の処理対象物の承認依頼を業務フローにて自動化し、承認持ち回りが無くなり、承認が完了するか、もしくは却下されるまでは承認作業が制御されているので作業の効率向上ができる。

【0034】また業務フローによる承認状況の表示が可能になることで、停滞している場所へ適切な対策うつことができる。

【図面の簡単な説明】

【図1】営業支援システムと業務フローシステムの構成の一例である。

【図2】営業支援システムと業務フローシステムの連携方法についてのフローチャートである。

【図3】顧客との取引状況の表示した例である。

【図4】顧客データから見積書を作成した例である。

【図5】業務フローに依頼した業務の状況を表示した例である。

【図6】営業支援システムと業務フローシステムを端末装置とサーバ装置で構成した一例である。

【図7】タスクの完了を表示した例である。

【図8】営業支援システムで管理する顧客データや業務フローの管理情報の例である。

【図9】業務フロー蓄積装置で蓄積する業務フローの情報の例である。

【符号の説明】

100…端末装置、

111…担当営業、

101…入力装置、

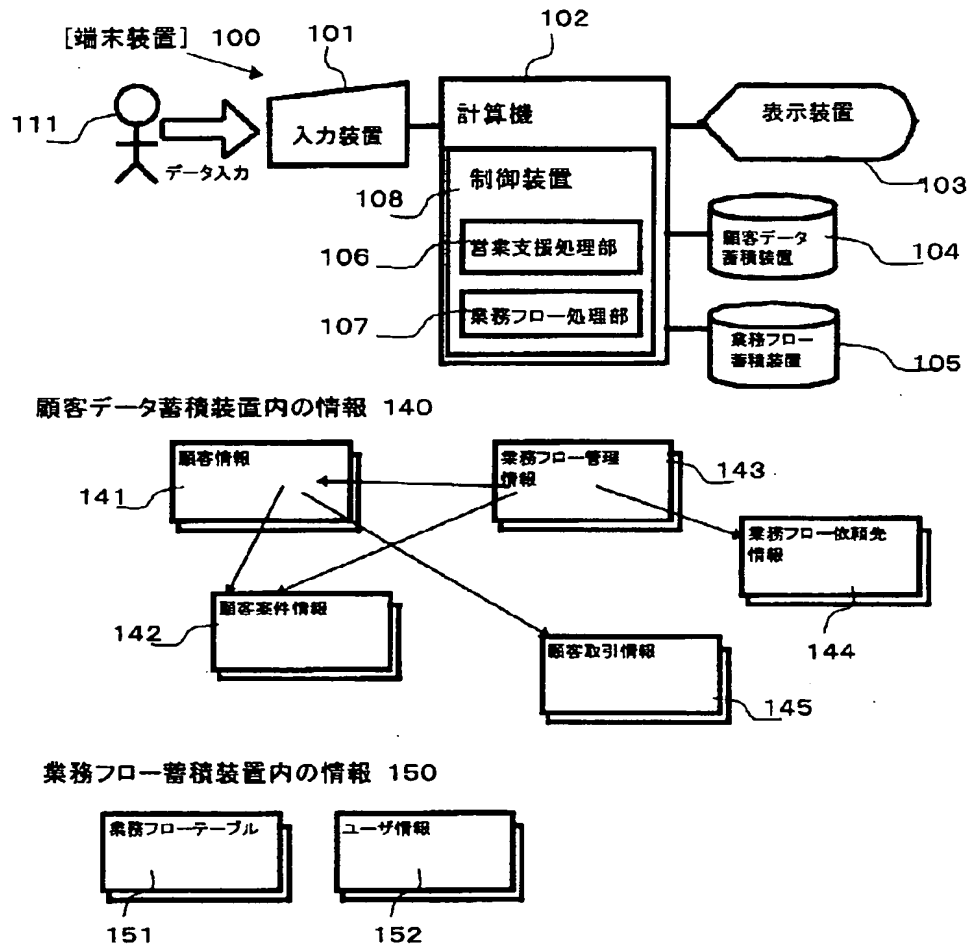
102…計算機、1

03…表示装置、104…顧客データ蓄積装置、105…業務フロー蓄積装置、106…営業支援処理部、107…業務フロー処理部、108…制御装置、140…顧客データ蓄積装置内の情報の関係図、150…業務フロー蓄積装置内の情報の関係図、300…顧客との取引情報を表示した画面、310…顧客データの表示欄、320…タスク一覧、321…タスク完了のチェック欄、322…タスク項目、323…タスクの開始日、324…タスクの完了日、331…検索ボタン、332…詳細ボタン、400…見積書、410…顧客案件の一覧、421…承認ボタン、422

…却下ボタン、500…業務フローの状況表示の画面、510…顧客データの表示欄、520…業務フローの状況表示欄、531…検索ボタン、532…詳細ボタン、601…依頼先情報の取得シーケンス、602…業務フローへの依頼シーケンス、603…業務フローの状態取得シーケンス、604…業務フローの状況表示シーケンス、700…タスクの完了表示の画面、701…完了チェック、702…タスクの完了日、801…業務フロー依頼先情報、802…業務フロー管理情報、803…顧客情報、804…顧客案件情報、805…顧客取引情報、901…業務フローテーブル。

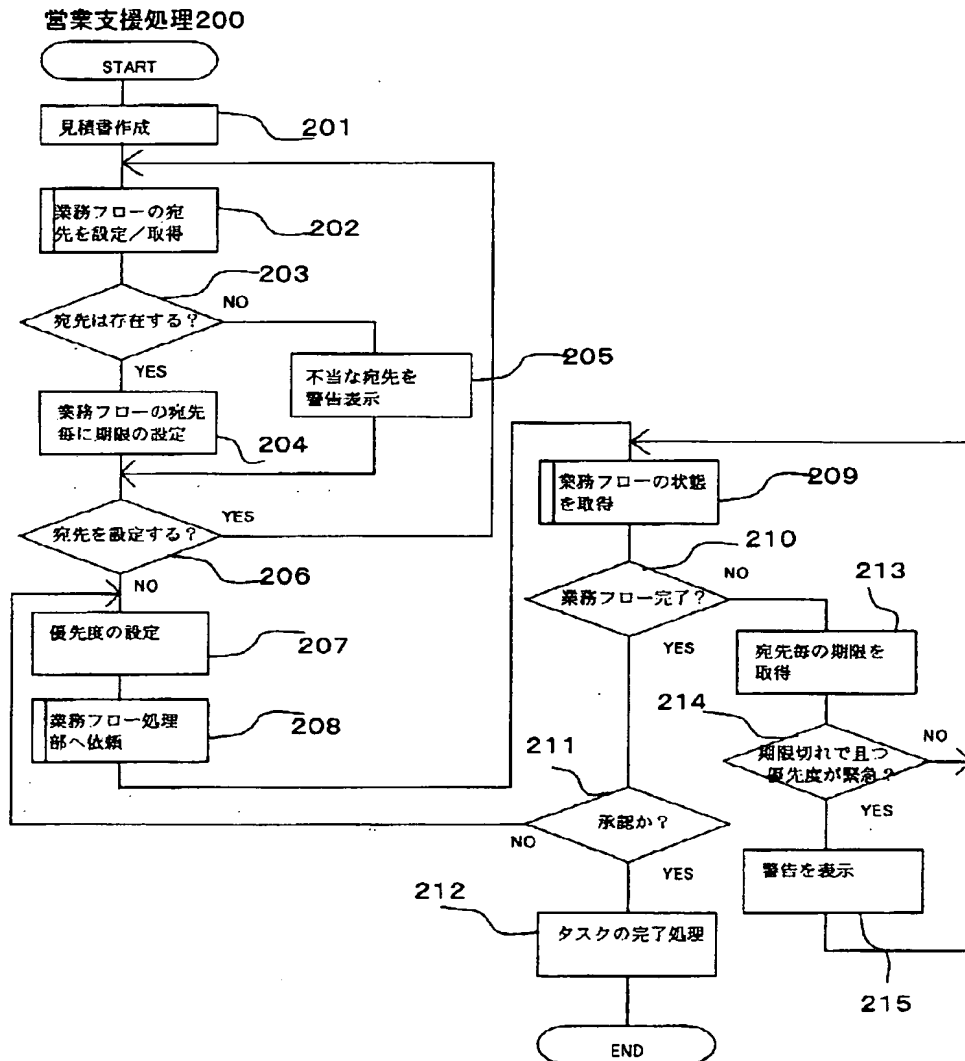
【図1】

図1



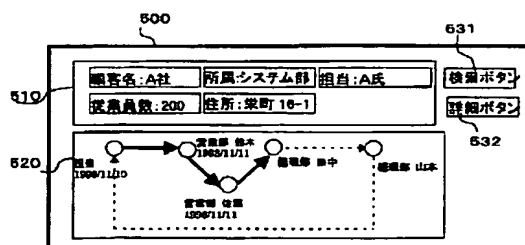
【図2】

図2



【図5】

図5



【図9】

図9

業務フロー管理装置の情報

業務フローテーブル 901

911	912	913	914	915	916
業務ID	依頼ID	送付先ID	処理日時	状態	コメント
MD001	00-12-01	01-22-01	1998/11/11 10:00	承認	見積書
	01-23-01	12-12-01	1998/11/11 11:00	承認	
	12-12-01	55-22-41		承認	
	55-22-41	-		承認	

【図3】

図3

300

310

顧客名: A社 所属: システム部 担当: A氏

従業員数: 200 住所: 栄町 16-1

322 323 324

331 検索ボタン

332 詳細ボタン

320

321

#	取引項目	開始日	完了日
✓	顧客とコンタクトを取る	1998/11/1	1998/11/1
✓	顧客提案	1998/11/1	1998/11/10
	見積依頼		
	見積提案		
	顧客承認		
	発注		

【図4】

図4

400

作成日: 1998/11/10

見積依頼書

会社名: A社

410

#	商品名	商品コード	数量	単価(KW)	金額(KW)
1	ノートPC	N-1234-567	100	200	20,000
2	PC	D-588-xxxx	10	250	2,500
3	プリンタ	P-L4000	5	100	500

421 承認ボタン

422 却下ボタン

【図7】

図7

700

顧客名: A社 所属: システム部 担当: A氏

従業員数: 200 住所: 栄町 16-1

701

702

検索ボタン

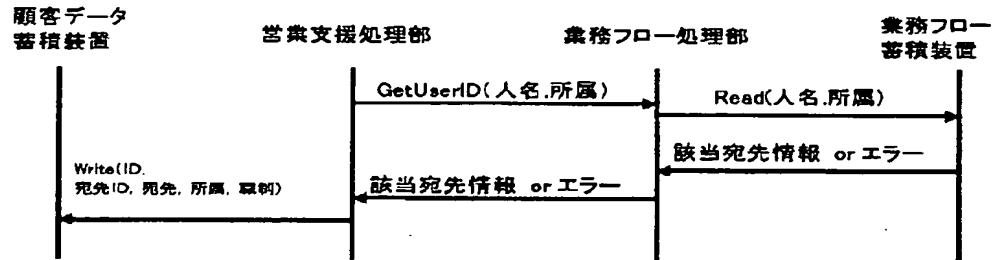
詳細ボタン

#	取引項目	開始日	完了日
✓	顧客とコンタクトを取る	1998/11/1	1998/11/1
✓	顧客提案	1998/11/1	1998/11/10
✓	見積依頼	1998/11/10	1998/11/12
	見積提案		
	顧客承認		
	発注		

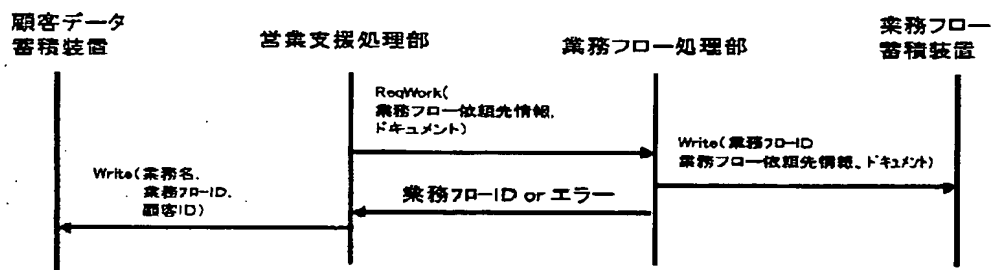
【図6】

図6

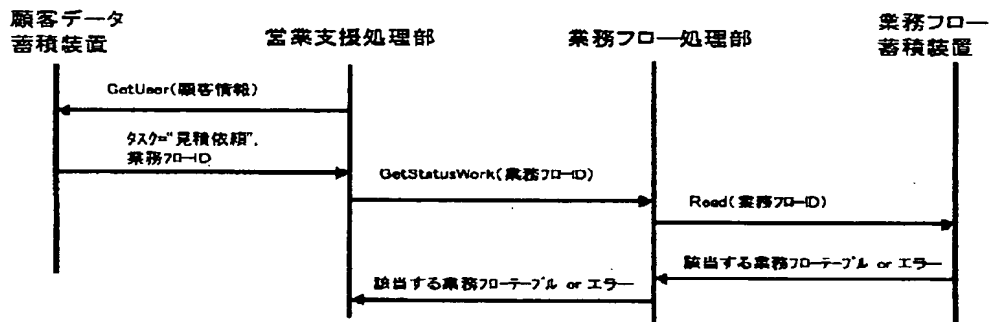
依頼先情報の取得シーケンス 601



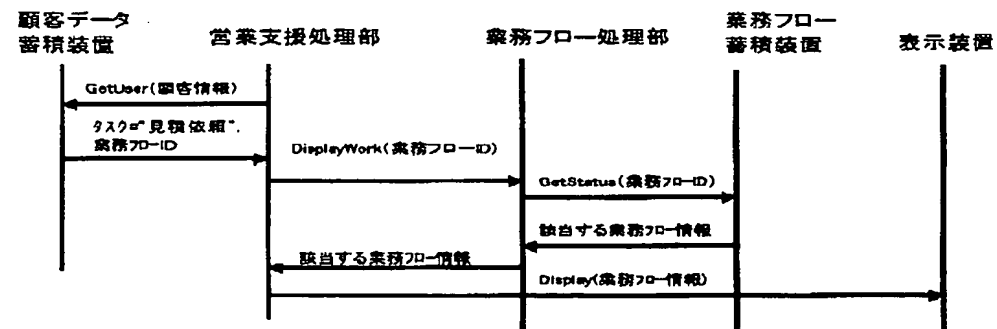
業務フローへの依頼シーケンス 602



業務フローの状態取得シーケンス 603



業務フローの状況表示シーケンス 604



【図8】

図8

顧客データ蓄積装置の情報

業務フロー依頼先情報 801

依頼先ID	宛先ID	宛先	所属	職制	依頼期限
00001	00-12-01	鈴木	営業部	上長	1998/11/12
	01-88-01	佐藤	営業部	上位上長	1998/11/12
	12-12-01	田中	経理部	上長	1998/11/13
	55-22-41	山本	経理部	上位上長	1998/11/13

業務フロー管理情報 802

ID	業務フローID	業務名	優先度	顧客ID	案件ID	依頼先ID
001	M0001	見積依頼	緊急	A-0001	AA-AB-1111	00001

顧客情報 803

顧客ID	顧客名	所属	担当	従業員数	住所	案件ID	顧客取引ID
A-0001	A社	システム部	A氏	200	業町16-1	AA-AB-1111	BB-AAA-0001

顧客案件情報 804

案件ID	商品名	商品コード	数量	単価	金額
AA-AB-1111	ノートPC	N-1234-567	100	200	20,000
	PC	D-566-XXXX	10	250	2,500
	プリンタ	P-L4000	5	100	500

顧客取引情報 805

顧客取引ID	取引項目	状態	開始日	完了日
BB-AAA-0001	顧客とコンタクトを取る	完了	1998/11/1	1998/11/1
	顧客提案	完了	1998/11/1	1998/11/10
	見積依頼	未完	1998/11/10	
	見積提案	未完		
	顧客承認	未完		
	発注	未完		

フロントページの続き

(72)発明者 福田 弘忠
 神奈川県横浜市戸塚区戸塚町5030番地 株
 式会社日立製作所ソフトウェア事業部内

(72)発明者 日比 之博
 神奈川県横浜市戸塚区戸塚町5030番地 株
 式会社日立製作所ソフトウェア事業部内

F ターム(参考) 5B049 AA06 BB11 CC11 CC22 CC31
EE05 FF03 FF04
5B075 ND03 ND20 ND23 PP13 PP30
PQ02 PQ15 PQ29 QT03 UU40